

REMARKS**Claim Objections**

Claim 3 was objected to due to an informality. Claim 3 has been amended to remove the word “is” in the fifth line as suggested by the Examiner.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3 and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Bill et al.* (U.S. Patent No. 5,675,537). Claims 1, 3 and 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Harari* (U.S. Patent No. 6,570,790). Applicant respectfully traverses this rejection.

Claim 1 has been amended to include limitations as to what is generated by the verify circuit. New claims 45 – 54 include these same limitations that Applicant believes is neither taught nor suggested by the art of record.

Bill et al. teaches an erase structure for performing a programming back operation and a concurrent verify operation. *Bill et al.* neither teaches nor suggests Applicant’s invention as claimed in the amended claims for a verify circuit that provides indication signals in response to the position of a bit line current or voltage with respect to a voltage/current erase level window.

Harari teaches a comparator for a program/read operation. The Examiner suggests that the terms “programming” and “erase” are used interchangeably in the semiconductor art. However, this cannot be the case in the present application.


The verify circuit of the present invention detects different current/voltage levels on the bit lines, depending on the programmed or erased state of the selected memory cell. If the cell is under-erased (i.e., still programmed) the bit line current/voltage is less than an erased memory cell. Therefore, the terms “programming” and “erase” cannot be used interchangeably with respect to the instant application. *Harari*, therefore, neither teaches nor suggests Applicant’s invention, as claimed in the amended claims, of a non-volatile memory device that has a verify circuit for detecting an erase current to verify an erased state of a selected memory cell.

CONCLUSION

For the above-cited reasons, Applicant respectfully requests that the Examiner allow the claims of the present application. If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2211. No new matter has been added and no additional fee is required by this amendment and response.

Respectfully submitted,

Date: _____

5/25/05
Kenneth W. Bolvin
Reg. No. 34,125

Attorneys for Applicant
Leffert Jay & Polglaze
P.O. Box 581009
Minneapolis, MN 55458-1009
T 612 312-2200
F 612 312-2250